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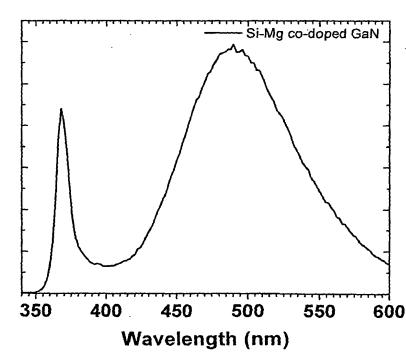
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(54) Title: METHOD TO SYNTHESIZE HIGHLY LUMINESCENT DOPED METAL NITRIDE POWDERS





(57) Abstract: A simple, inexpensive method of producing in bulk a doped metal nitride powder that exhibits a high luminescent efficiency, by first forming a metal-dopant alloy and then reacting the alloy with high purity ammonia under controlled conditions in a reactor. The resulting doped metal nitride powders will exhibit a luminescent efficiency that greatly exceeds that seen in pure undoped GaN powders, doped GaN thin films, and ZnS powders.